

**REMARKS**

Claims 74 and 80 are pending in this application. Applicants have amended claim 80 and newly added claim 80 in order to more particularly and completely claim the present invention. No new matter has been introduced. Reconsideration and allowance of the pending claims are hereby requested.

**Claim Rejections – 35 U.S.C. §103**

The Examiner has rejected claim 74 under 35 U.S.C. 103(a) as being unpatentable over Kimball in view of Bose.

Independent claim 74 has been amended to clarify that the homogeneous and inhomogeneous characteristics are evaluated by a bandwidth of the dispersion curve data. Support for this could be found in paragraph 42 and Figs. 5A-5C of the present application.

Such technical features are not taught by the prior art of record. The Kimball reference simply discloses dispersive wave processing for shear slowness at each depth. Furthermore, the Bose reference simply teaches that the homogeneous and inhomogeneous characteristics depend upon whether the measured data fit the modeled dispersion curve with the homogeneous case. See Column 10 Lines 7 to 41 and Figs. 11B and 12B of the Bose reference. Accordingly, since all limitations of claim 74 are not suggested by either of the references, claim 74 should be allowable over the prior art of record.

Claim 80 has been newly added to specify that the dispersion curve data for each depth are projected onto a slowness axis. Support for this could be found in paragraph 32 and Fig. 4B of the present application. Since claim 80 depends from claim 74, claim 80 should be also allowable for at least the same reasons. Furthermore, projecting the dispersion curve data for each depth onto a slowness axis is not disclosed by the prior art of record.

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In the event that any additional fees or credits are due owing to this response, the Commissioner is hereby authorized to charge the amount necessary to cover any fee that may be due or to credit any overpayment to Deposit Account 50-1122 (Reference Number: 26.0273 US).

Respectfully submitted,

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